

# CONCRETE & CONSTRUCTIONAL ENGINEERING

## INDEX FOR VOLUME LIX, 1964

Admixtures Association .....	436	Einfluss der Zwischenlage auf Streuung und Größe der Spaltzugfestigkeit von Beton, by R. Sell ..	308
Aluminum powder in cement grout .....	106	Einfluss des Zementgehaltes und der Versuchsanordnung auf die Kenngrößen der Biegedruckzone von Stahlbetonbalken, by H. Rusch und S. Stockl ..	308
Analysis of edge-loaded rectangular slab resting on soil .....	445	Verhalten der Biegedruck zone von Stahlbetonbalken, by R. Rusch und S. Stockl ..	308
" of frames with beamless floors .....	401	Elastic Stability of Post-tensioned Prestressed Concrete Members, by C. B. Wilby ..	262
" for shallow shells of translation .....	425	Elastische und Plastische Stauchungen von Beton infolge Druckschwell- und Standbelastung, by A. Mehmel und E. Kern ..	267
<b>AUTHORS</b>		Elementary Theory of Elastic Plates, by L. G. Jaeger ..	227
Abelès, P. W., on Counteraction of the selfweight of prestressed concrete beams .....	159	Elementary Theory of Structural Strength, by F. Panilillo ..	119
Appeltauer, J. W., et al., on Critical loads of plane frames .....	293	Engineering Mathematics, by A. H. Douglas ..	444
Ashdown, A. J., on A theory of Bonding .....	249, 297, 333	Ermittlung der Eigenspannungen und der Eintragslängen bei Spannbetonfertigteilen, by K. Gaede ..	308
Baker, A. L. L., on The Inelastic space frame: prestressed concrete .....	131	Grenztragfähigkeits-Theorie der Platten, by A. Sawczuk und T. Jaeger ..	188
Barnes, L. A. B., on Practical analysis of frames with beamless floors .....	401	Grundbau: Untersuchung und Festigkeitslehre des Baugrundes, Part I, by K. Szechy ..	88
Barta, T. A., et al., on Critical loads of plane frames .....	293	Industrialised Building—50 International Methods, by R. M. E. Diamant ..	261
Bridle, R. J., et al., on The design of concrete hinges .....	277	Knicken, Biegedrillknicken, Kippen, by Kollbrunner und Meister ..	4
Burgess, J. H., on A Multi-storey car park at Leeds .....	338	Konsistenzmessung von Beton, by W. Albrecht und H. Schäffer ..	449
Burgess, J. H., et al., on Rapid construction of a precast concrete building .....	415	Lightweight Concretes, by G. Rudnai ..	157
Chabowski, A. J., et al., on A model to determine temperature effects on a cylindrical structure .....	177	Mechanisation in Building, by H. G. Vallings ..	350
Cluderay, C., et al., on Rapid construction of a precast concrete building .....	415	Mehrfeldrahmen: Vol. II, by A. Kleinlogel and A. Haselbach ..	87
Cusens, A. R., on Tests on helical stairs .....	357	Military Engineering, Vol. XIV: Part II—Reinforced Concrete Design, and Part III—prestressed Concrete Design ..	424
Csonka, P., on Special boundary conditions in membrane shells .....	327, 375	Modellstatische Untersuchung punktformig, etc., by A. Mehmel and H. Weise ..	449
Fischer, L., on Approximate analysis for shallow shells of translation .....	425	Modern Power Station Practice, Vols. I & II, 49; Vol. III, 157; Vol. IV, 337	449
Gallia, A., on Continuous bridges on elastic supports .....	202, 203	Multibay Frames, by A. Kleinlogel and A. Haselbach ..	87
Gangadharan, A. C., et al., on Ultimate-load analysis of edge-loaded rectangular slab resting on soil .....	445	Plastic Methods of Structural Analysis, by B. G. Neal ..	49
Kennedy, J. B., et al., on Stresses in stiffening beams of skewed slab bridges .....	241	Portland Cement and Asphalt Concretes, by T. D. Larson ..	344
Lenczner, D., on Pressures in containers of granular materials .....	165, 223	Prefabricated Concrete for Industrial and Public Structures, by L. Mokk ..	187
Morgan, V. A., on Bored piles in London clay .....	411	Prestressed Concrete Design and Construction, by F. Leonhardt ..	454
Peredy, J., et al., on The economic design of members subjected to shearing (ultimate-load method) .....	57, 97	Prestressed Concrete for Architects and Engineers, by H. K. Preston ..	314
Reddy, D. V., et al., on Ultimate-load analysis of edge-loaded rectangular slab resting on soil .....	445	Prestressed Concrete to C.P. 115, by P. E. Regan ..	88
Rezanoff, T., et al., on Stresses in stiffening beams of skewed slab bridges .....	241	Properties of Concrete, by A. M. Neville ..	292
Sims, F. A., et al., on The design of concrete hinges .....	277	Rückprallprüfung by K. Gaede and E. Smidt ..	449
Sparkes, A. N., on Effects of oiling and grouping prestressing wires .....	195	Schalens-Faltwerke-Rippenkuppen und Hängedächer, Vol. II: Zylinderschalen, Shedschalen, Regelschalen, by J. Born ..	50
Taleb, N. J., on The analysis of stairs with unsupported intermediate landings .....	315, 331	Schubversuche an Einfeldrigen Stahlbetonbalken mit und ohne Schubbewehrung, by F. Leonhardt and R. Walther ..	267
Turner, F. H., on Stiffness, coefficient for cylindrical shells .....	409, 414	Schubversuche an Plattenbalken mit Unterschiedlicher Schubbewehrung, by F. Leonhardt and R. Walther ..	267
Visy, Z., et al., on The Economic design of members subjected to shearing (ultimate-load method) .....	57, 97	Spannungs-Denungs-Linien des Betons und Spannungsverteilung in der Biegedruckzone bei Konstanter Dehngeschwindigkeit, by C. Rasch ..	267
Wajda, R. L., et al., on A model to determine temperature effects on a cylindrical structure .....	177	Stabilitätstheorie II, by G. Burgermeister, H. Steup and H. Kretschmar ..	228
Award for a concrete structure .....	305	Stahlbeton, Bauwerke-Bautechnik, by W. Drechsel and E. Neufert ..	418
Beams of skewed slab bridges, Stresses in stiffening .....	241	Statik Rotationssymmetrischer Flachentragwerke, by E. Hampe ..	228
Blocks, Chimneys constructed with precast .....	382	Structural Concrete, by J. D. Davies ..	292
Bonding, A theory of .....	249, 297, 333	Structural Precast Concrete, by C. W. Glover ..	187
<b>BOOK REVIEWS</b>		Structures for Nuclear Power, by S. Gill ..	261
Advanced Reinforced Concrete, by C. W. Dunham ..	261	Survey Practice on Construction Sites, by L. M. Hayward ..	4
Balken auf elastischer Unterlage, by G. Orlov and H. Saxonhofer .....	424	Über den Zusammenhang zwischen Qualität und Sicherheit im Betonbau, by H. Blaut ..	267
Basic design and construction in prestressed concrete, by J. D. Harris and I. C. Smith .....	119	Untersuchungen über das Bruch- und Verformungsverhalten von Beton bei Zweifachiger Beanspruchung, by H. Weigler and G. Becker ..	267
Beanspruchung des Verbundes, by H. Kupfer .....	449	Versuche an Plattenbalken mit Hohem Schubbewehrung, by F. Leonhardt and R. Walther ..	267
Bemessungsverfahren, by B. Loser .....	50	Versuche mit Betonformstählen, by H. Rusch and G. Rehm ..	308
Bending and Stretching of Plates, by E. H. Mansfield .....	227	Versuche zur Bestimmung der Übertragungslänge von Spannstählen, by H. Rusch and G. Rehm ..	308
Berechnung von Verdundkonstruktionen aus Stahl und Beton, by H. Wippel .....	187	Vorgespannter Beton, by A. Mehmel ..	158
Bestimmungen des Deutschen Ausschusses für Stahlbeton-Ergänzungen und Erläuterungen zur 7. Auflage, by B. Wedler .....	158		
Beton-2, by W. Grun .....	314		
Betongelenke, by J. Dix .....	267		
Beton-Kalender, 1964. Vols I & II .....	418		
Building Law and Regulations, by J. J. Clarke .....	188		
Candela: The Shell Builder, by C. Faber .....	350		
Concrete: Plain, Reinforced, Prestressed, Shell, by R. H. Evans and C. B. Wilby .....	350		
Concrete Practice, by R. H. Elvery .....	344		
Damp Walls, by R. W. Castle .....	271		
Design of Prestressed concrete structures, by K. W. Bieger .....	424		
Dictionary of Architecture and Building Trades, ed. by A. Zboinski and L. Tysynski .....	227		
Dictionary of Building, by J. S. Scott .....	227		
Dictionary of Quarries and Pits: 1963-64 .....	88		
Durchlaufträger, Rahmen und Platten, by J. Hahn .....	50		

Books received	158, 271, 314, 424
Boundary conditions in membrane shells, Special	327, 375
<b>BRIDGES</b>	
Bridge design competition, Results and designs	4, 113
Bridges on the Heads of the Valleys road	365
Bridges on the Newark by-pass road	351
Buchanans bridge	247
Composite construction of a bridge in the Middle East	194
Concrete bridges on the new motorways	389, 437
Construction with a tower crane	271
Continuous bridges on elastic supports	202, 203
Footbridges, Two new concrete	263
Long prestressed concrete bridge in Germany	86
Long-span arch bridge in Portugal	31
Medway Bridge	52
Motorway	389, 437
Standard prestressed precast concrete bridge beams	125, 407
Stresses in stiffening beams of skewed slab bridges	241
British Precast Concrete Federation	77
<b>BUILDINGS</b>	
Building over a railway cutting	156
Construction of students' hostels	153
Ecclesiastical structures, Some new	38
Gatwick Airport extensions	265
Multi-storey car park at Leeds	338
New buildings, Some other	44
New Zealand House, London	33
Precast construction of a training college	93
Rapid construction of a precast concrete building	415
Reinforced concrete buildings in the Skopje earthquake	31
Removable wide-slab construction of a car-parking building	232
St Mary's Priory Church, Leyland	255
Structures in Israel, Concrete	67
Tallest flats in London	231
Testing the seismic resistance of buildings	272
Bulletins received 51, 160, 188, 221, 260, 325, 408, 418, 454	
Cement in prestressed concrete, High-alumina	381
" New bulletins on high-alumina	381
" New polymer	384
" Portland-blafurnace	118
Clettore, Mr Cyril S.	37
Chimney 820 ft. high	160
Chimneys constructed with precast blocks	382
Church, Leyland, St Mary's Priory	255
Composite construction of a bridge in the Middle East	194
Concrete, High-alumina cement	413
" replacing steel	272
" Research on	267, 308, 449
" Specification for	189
" Symposium on	184, 264
Consolidation of soils, Thermal	417
Consultancies, Changes in	32, 236, 266, 271, 374, 436
Cracking of concrete, Prevention of	248
Cylinder foundations, Loading tests on deep bored	83
Cylindrical structure, Model to determine temperature effects on	177
Dams in United Kingdom, New	5
Deformed bars, Research on concrete members reinforced with	120
Developments in design	270
Dry-batcher for concrete, Mobile	52
Earthquake, Reinforced concrete buildings in the Skopje	31
Economic design of members subjected to shearing (ultimate-load method)	57, 97
Edge-loaded rectangular slab on soil Analysis of	445
<b>EDITORIAL NOTES</b>	
Bored piles in clay	387
Comments on Codes	421
Concrete and the new tunnels	273
" : the material	1
Construction in winter	53
Developments in design	89
Effect of sonic booms on structures	349
Foundation engineering: recent developments	199
The Government and the constructional industry	161, 172
Lightweight structural concrete	91
Mathematics in engineering	311, 331
National Productivity Year	56
New concrete roads	237
New road bridges	347, 456
Residential accommodation for students	129
Stability of jointed structures	54
Summer of the concrete road	313
Exhibition in Scotland, Building of building and road-making machinery in Russia	172, 118
Fifty Years Ago: 1914	3
Films on building	52
" on Medway Bridge	52
Flexural mechanics of reinforced concrete, Symposium	91
Floors, heating elements embedded in concrete in U.S.A., Post-tensioned prestressed	345
" Patents for	198
Formwork, Recent patents for	455
Foundation engineering, Developments in	385, 419
Foundations, Symposium on	211
	152
Foundations and substructures, Codes of practice for	235
Frame, Prestressed concrete inelastic space	131
Frames, Critical loads of plane	293
" with beamless floors, Analysis of	401
Grouping and oiling of prestressing wires	195
Grout, Aluminium powder in cement	106
Harbour, Reconstruction of Bengazi	173
Heating elements embedded in concrete floors	345
Hinges, Design of concrete	277
Honour, An	85
Hostels, Construction of students'	153
Incomes, Professional engineers'	51
International Association for Bridge and Structural Engineering	172
Lightweight concrete group	374
Loads on plane frames, Critical	293
Machinery, Exhibition in Russia	118
Marine and riverside structures, New	17
Materials, Pressures in containers of granular	165, 223
Members reinforced with deformed bars, Research on	
" concrete	
" subjected to shearing, Economical design of	120
" Motorways: see 'Roads' and 'Bridges'	57, 97
Nuclear power station, Wylyfa stations, Progress at	264, 229
Oiling and grouping prestressing wires, Effects of	195
Piles and foundations, Symposium on	152
" in clay, Loading tests on large bored	28
" in London clay, Bored	411
Pipe-lines installed by thrusting process	287
Pressures in containers of granular materials	165, 223
<b>PRESTRESSED CONCRETE</b>	
Bridge in Germany, Long	86
Bridges on the new motorways	389, 437
Counteraction of self-weight of beams	159
Effects of oiling and grouping of wires	195
High-alumina cement in prestressed concrete	381
Inelastic space frame: prestressed concrete	131
Patents	310
Post-tensioned floors in U.S.A.	198
Prestressed Concrete Development Group and the 1966 F.I.P. Congress	356
Principal post-tensioning systems	79, 107
Tanks, Sludge-digestion	304
Standard precast concrete bridge beams	125, 407
Study sessions	356
Price of cement	77
Prize designs, 'Concrete and Constructional Engineering'	32
Quantities by computers	228
Railways, Tunnelling machines for tube	306
Reinforced Concrete Association	364
Reinforcement, Patents for	346
" Requirements of	384
" Revised British Standards	326
Research by the German committee for reinforced concrete	267, 308, 449
Building	450
Retaining wall, Large bored-pile	82
Road, Newark by-pass	321
" Witham by-pass	345
Roads, Symposium on urban	266
Sands for concrete, Symposium on	27, 106
Shearing, Economical design of members subjected to	57, 97
Shells of translation, Approximate analysis for shallow	425
" Special boundary conditions in membrane	327, 375
Stiffness coefficients for cylindrical	409, 414
Soil, Analysis of edge-loaded rectangular slab resting on	445
Soils, Testing	27
" Thermal consolidation of	417
Specification for concrete	189
Stairs, Tests on helical	257
" with unsupported intermediate landings, Analysis of	315, 331
Standards, A.S.T.M.	160
Steelworks, Concrete construction at Tinsley Park	141
Stiffness coefficients for cylindrical shells	409, 414
Strain-measuring equipment, Portable	248
Stresses in stiffening beams of skewed-slab bridges	241
Structures in Israel, Concrete	67
Supports, Continuous bridges on elastic	202, 203
Tanks, Prestressed concrete sludge-digestion	304
Technical publishing in U.S.S.R.	140
Temperature effects on cylindrical structure, Model to determine	177
Terzaghi, Professor Karl	37
Test-bed at Stockport, Engine	286
" Engine	185
Tests of concrete, Non-destructive	16
" on deep-bored cylinder foundations, Loading	83
" on large bored piles in clay, Loading	28
Thrusting process, Installing pipe-lines by	287
Tunnelling machines for tube railways	306
Tunnels, Some new	378
Walls, Code of practice for loadbearing	325
Weights and measures, Redefinition of	186
Wide-slab construction of car-parking building, Removable	232

